

FISCAL YEAR 1994 RECYCLING & WASTE REDUCTION REPORT

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JULY 1, 1993 - JUNE 30, 1994



PREPARED BY:
STATE OF MISSOURI
OFFICE OF ADMINISTRATION
IN CONSULTATION WITH THE
ENVIRONMENTAL IMPROVEMENT AND
ENERGY RESOURCES AUTHORITY

FISCAL YEAR 1994 RECYCLING & WASTE REDUCTION REPORT

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| PAGE | CONTENTS |
|------|--|
| 1 | Introduction |
| 3 | Purchases of Recovered Material Content Products |
| 4 | Recycled Products and Environmental Services Contracts |
| 5 | Recycling Collection Activities |
| 6 | MIRC |
| 6 | Missouri Cooperative Procurement Program |
| 7 | State Department Activities |
| 14 | State Recycling Goals |
| 16 | State Recycling Award |
| 17 | EIERA Recommendations Update |



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To the Members of the General Assembly of the State of Missouri:

In accordance with RSMo 34.031, we are submitting the Fiscal Year 1994 Recycling and Waste Reduction Report. This report provides information on the purchase of recycled products and waste reduction activities of the State of Missouri for the twelve month period of July 1, 1993 through June 30, 1994 plus lapse period purchases through August 31, 1994.

Information on purchases was obtained from the Missouri Automated Procurement System (MAPS). Recent system design changes to MAPS allow us to report the volume and cost of purchases of recovered materials compared to purchases of virgin materials by the type of item. The availability of this more detailed information will provide an opportunity for the State of Missouri to assess its recycling procurement and waste reduction accomplishments in comparison to other states and industries.

This is the first Recycling and Waste Reduction Annual Report based on a fiscal year reporting period. An interim report for the period January 1, 1993 through June 30, 1993 was not published in order to focus on the MAPS enhancements.

The Office of Administration is proud of the progress the State of Missouri has made in the area of recycling collection, waste reduction and recycled procurement. We appreciate the support of the General Assembly as we continue to improve our recycling and waste reduction programs.

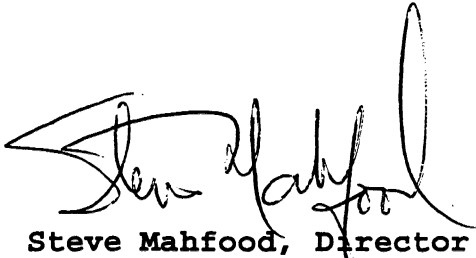
A handwritten signature in black ink, reading "Richard A. Hanson". The signature is written in a cursive, flowing style with a large initial "R".

Richard A. Hanson
Commissioner, Office of Administration

To the Members of the General Assembly State of Missouri:

The Environmental Improvement and Energy Resources Authority (EIERA) is pleased with the progress made by the Office of Administration, Division of Purchasing and Materials Management, to update its Missouri Automated Procurement System so we have a more accurate picture of the types and quantities of recycled products purchased by state government.

The EIERA and its Missouri Market Development Program continue to work with the Office of Administration to promote the purchase of products made with recycled content and to cooperatively implement the EIERA recommendations made in the 1991 Waste Reduction Report. Through government leadership and example, we intend to demonstrate that products made with recycled content are in demand which will lead to an expansion of manufacturers utilizing recycled materials in their products. The EIERA and the Office of Administration have a productive partnership and we anticipate even greater progress in our mutual activities this year.

A handwritten signature in black ink, appearing to read "Steve Mahfood". The signature is stylized with a large, sweeping initial "S" and a long, trailing flourish.

Steve Mahfood, Director
Environmental Improvement and Energy Resources Authority

PURCHASES OF RECOVERED MATERIAL CONTENT PRODUCTS

During fiscal year 1994, the State of Missouri purchased \$17,085,123 of products which were available in both recovered material and virgin material content. Approximately \$6,000,000 of the products purchased, or 35%, were recovered material content products.

Recovered material products include course and fine paper products such as paper, towels, roll paper, printed documents, continuous computer paper and forms, cut sheets, toilet tissue, boxes, facial tissue, publications, carbonless paper, fax paper and envelopes. This also includes paper/plastic disposable items (i.e. bags) and various office supplies such as 3-ring binders, ruler pads, index sheets and tabs.

Information on purchases of specific products is available from the Office of Administration, Division of Purchasing and Materials Management by contacting Cynthia Stafford, State Office Recycling Coordinator, P.O. Box 809, Jefferson City, Missouri 65101 or phone (314) 751-3384.



RECYCLED PRODUCTS AND ENVIRONMENTAL SERVICES CONTRACTS

The Office of Administration, Division of Purchasing and Materials Management, has expanded previous products and services available to state agencies and Cooperative Procurement members which utilize recovered materials or provide for the improvement of the environment. Listed below are statewide contracts with these products or services available.

| Product/Service | Contract |
|---|----------------|
| Fine (Copy) Paper | C300452001-004 |
| Fax Paper | C302673001 |
| Computer Paper | C301436001-002 |
| Rechargeable Nicad Batteries | C400712001-003 |
| Coarse Paper Products | C301327001 |
| Polyethylene Bags | C202227001 |
| Office Supplies | C201946001-006 |
| Hazardous Substance Disposal Service | C001796001-003 |
| Cartridge Recharging Service | C400200002 |
| Waste Oil Pick-up Service | C101847001 |
| Recyclable Materials Collection Service | C401086001-002 |

RECYCLING COLLECTION ACTIVITIES

Statewide Recycling Collection Services Contract

During fiscal year 1994, the central Missouri state offices collected approximately 462 tons_of paper recyclables. The collection area includes Jefferson City, Fulton, Columbia and Boonville. The State Recycling Fund received \$7,929 in revenues from the collection activities and incurred costs of \$7,505 for the fiscal year. Costs of the program include collection containers, recycling literature and publications, and recycling conference expenses.

The statewide recycling collection services contract for fiscal year 1995 has been awarded to M.R.S. Recycling of Jefferson City. The recycling services provided to central Missouri state agencies will be cost free. The Division of Purchasing and Materials Management is pleased with the proposed performance indicated by M.R.S. Recycling, and we expect higher volumes and increased types of recyclables to be collected over the next year. New collection areas include provisions for the shredding and recycling of confidential records and a new contract for the collection of newspaper, corrugated paper, aluminum, glass, plastics and tin cans.

Recycling Collection Around the State

The State Office Recycling Coordinator will be meeting with the state facilities in Springfield, Kansas City, St. Louis and other outlying cities to develop contracted recycling collection services. The Division of Purchasing and Materials Management intends to establish no cost recycling contracts for these areas.

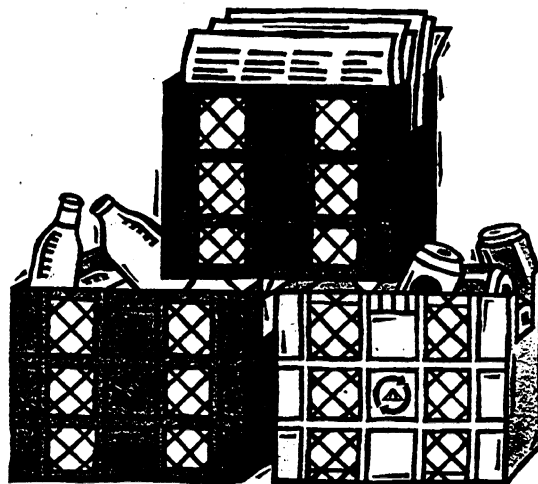
MISSOURI INTERAGENCY RECYCLING COMMITTEE

In April 1994, Governor Carnahan encouraged support of a Missouri Buy-Recycled Initiative and urged all Missourians to purchase products made with recycled content whenever possible. At the same time, Governor Carnahan announced the creation of the Missouri Interagency Recycling Committee (MIRC). Committee members will include representatives from all State departments. The committee will focus on recycling procurement, waste reduction and collection issues. The first meeting of the MIRC will be held in the first quarter of fiscal year 1995.

MISSOURI COOPERATIVE PROCUREMENT PROGRAM

The Office of Administration, Division of Purchasing and Materials Management, oversees the Missouri Cooperative Procurement Program. The State-Local Technical Services Act, Chapter 67.360, RSMo, authorizes political subdivisions to utilize statewide contracts awarded by the Division of Purchasing and Materials Management. The Missouri Cooperative Procurement Program has approximately 925 active members.

Cooperative Procurement members can purchase recycled products and environmental services from statewide contracts. Cooperative Procurement members are notified of these products and services through the Cooperative Procurement Newsletter which is issued quarterly.



STATE DEPARTMENT ACTIVITIES

State departments were given the opportunity to report their recycling collection, waste reduction and recycled product procurement activity for fiscal year 1994. Presented below are the responses the Division of Purchasing and Materials Management received from participating departments.

ADMINISTRATION

Recycling Collection

All types of acceptable paper
Aluminum
Printer toner cartridges
Telephone books
Gasoline credit cards
Auto batteries
Motor oil

Waste Reduction

Duplexed copies
Use of glass drinking cups
Refillable pens
Scrap paper used for note pads
Limited purchase of newsprint
Use of routing guides
Reusing calculator tape's back side

Procurement

Paper
Envelopes
Office Supplies
Post-It notes
Bags
Towels
Tissues
Re-refined oil
Recycling containers

AGRICULTURE

Recycling Collection

All types of acceptable paper
Aluminum
Printer toner cartridges
Telephone books

Waste Reduction

Duplexed copies
Waste paper used for note pads
Use glass or reusable plastic mugs
and drinking glasses
Utilize routing slips

Procurement

Recycled paper
Recycled paper products
Recycled products on state contract

Additional Activities

Recyclable plastic cups-State Fair;
Waste cooking oil, cardboard,
used motor oil and aluminum cans
are all recycled during State Fair;
Request soy-based ink in printing
requirements, including State Fair
annual catalog.

CONSERVATION

Recycling Collection

Tires/Batteries (Auctioned to Recyclers)
All types of acceptable paper
Aluminum
Motor Oil
Pasteboard
Telephone books

Waste Reduction

Duplexed Copies

Procurement

800 gal. motor oil
888,000 pads. paper
7,200 rolls of tissue
3,000 rolls of towels
recycled auto parts

CORRECTIONS

Recycling Collection

All types of acceptable paper
Aluminum
Plastics
Tin

Waste Reduction

Limit the newsprint purchased

Procurement

Paper
Envelopes

ECONOMIC DEVELOPMENT

Recycling Collection

All types of acceptable paper
Aluminum
Telephone books

Waste Reduction

Duplexed Copies

Procurement

Paper
Business cards
Recycled products on state contract



HEALTH

Recycling Collection

All types of acceptable paper
Aluminum
Corrugated
Wood
Toner cartridges
Telephone books

Waste Reduction

Reuse shipping cartons to distribute office supplies
and forms from warehouses. Boxes are then reused
again for outgoing shipments
Redistribute property and supply items to avoid the
purchase of new items
Rebuild pallets for reuse
Duplexed copies
Use obsolete forms for note pads

Procurement

Paper
Envelopes
Toner cartridges which are refillable

HIGHWAY & TRANSPORTATION

Recycling Collection

All types of acceptable paper
105,000 signs
Salvage sign button copy (72% cost savings)
Solvent recovery still to recycle solvents
Antifreeze collected and reused (24,000 lbs.)
Recycle Freon (approx. 50 lbs. annually)
Expanded use of waste oil in heaters
Scrap computer paper used for note pads
Splice broken wood and metal sign posts
Straighten and reuse damaged guardrails
Boxes for shipping highway signs reused
Reuse damaged bridge structural steel
Increased rotomillings and laying mixed asphalt
Aggregate placed under asphalt storage tank to absorb
any spillage, then used on road
Reuse concrete from roadway repair for erosion control
Striper cleaning fluid used in striping paint
Reuse obsolete guardrail panels for cribbing and
erosion control
Use damaged metal posts for equipment storage racks

Waste Reduction

Recycle laser toner cartridges
Corrugated cardboard collected and sold in Springfield
Scrap steel and aluminum from maintenance activities
are sold
Pay recyclers to pick up used motor oil
Provide recycling information to 5,500 Adopt-a-Highway
groups
Include a recycling tip column in the "Roadside
Review" newsletter
Exploring the use of shredded tires in landscaping
Collecting lead-acid batteries and selling
"Virgin" removed from non-structural plastic product
specifications
Duplexed copies
Hazardous materials/waste survey department-wide
Sand blast residue containing lead paint sent to lead
smelter
Collection of parts cleaner solvent-contract
Purchasing MARS recycling machine to recycle paint
sandblast
Maintain a list of products with recycled materials
Task Force evaluating composting city yard waste

Procurement (Dept. of Highway & Transp. Cont'd.)

Recycled paper, towels, toilet paper, envelopes
Reclaimed rubber to use in asphalt on test project
Sawdust to cover crack pouring asphalt
Cinders for snow removal
Wet bottom boiler slag for snow removal
Fly ash in concrete
Roofing shingle granules for snow removal
Testing recycled plastic wheel stops
Recycled paper for printing of 3.5 million highway
maps, brochures and newsletters
Re-refined oil in department automobiles
Expanded use of recapped tires
Expanded use of sawdust and mulch for roadside
beautification
Fly ash for fill material and pavement grouting
Lime Kiln dust for soil stabilization
Truck tire sidewalls used for traffic cone ballast
Lead mine tailings in asphalt
Iron mountain chat by product in asphalt

HOUSE OF REPRESENTATIVES

Recycling Collection

All types of acceptable paper
Aluminum
Ink cartridges

Waste Reduction

Duplexed copies

Procurement

Paper
Soy-based ink
Recycled ink cartridges

INSURANCE

Recycling Collection

All types of acceptable paper
Aluminum
Toner cartridges

Waste Reduction

Duplexed copies
Utilize glass cups and dishes
Limited purchase of newsprint

Procurement

Paper
Envelopes
Towels
Post-It Notes
10% grain ethanol gasoline in state vehicles

LABOR AND INDUSTRIAL RELATIONS

Recycling Collection

Paper
Aluminum
Plastic
Glass

Waste Reduction

Duplexed copies
Scrap paper reused for note pads
Laser toner cartridges recycled
Reuse wooden pallets
Utilize reusable drinking cups

Procurement

Paper
Card Stock
Soy-based ink

MENTAL HEALTH

Recycling Collection

All types of acceptable paper
Aluminum
Newspaper

Waste Reduction

Recycle toner cartridges
Duplexed copies
Scrap paper used for note pads

Procurement

Paper
Notepads
Recycled products on state contract

NATURAL RESOURCES

Recycling Collection

All types of acceptable paper
Aluminum
Printer ribbons
Rechargeable copier cartridges
Used motor oil
Auto batteries
Aluminum plates for printing

Waste Reduction

Duplexed copies
Encourage ceramic mugs instead
of disposable
Reuse envelopes with adhesive
labels over printed address labels
Management encourages employees to
reduce and reuse

Procurement

Paper
Business cards
Toilet paper
Bags
Wood bark landscaping
Re-refined motor oil
Ledger pads
Plastic bark benches

PUBLIC SAFETY

Recycling Collection

- All types of acceptable paper
- Aluminum
- Newspaper
- Corrugated
- Telephone books
- Motor oil
- Tires taken to Highway Department for recycling

Waste Reduction

- Duplexed copies
- Limit the purchase of newsprint (subscriptions cut by 50%)
- Considering the purchase of an Imaging System to reduce and eliminate paper requirements
- Scrap paper used for note pads
- Utilize glass dishes or buy reusable food service utensils and containers

Procurement

- Paper
- Recycled products available on statewide contract
- Towels
- Tissues
- Envelopes
- Recycled Toner cartridges

REVENUE

Recycling Collection

- All types of acceptable paper
- Telephone books
- Tax records (10 truckloads in FY'94)

Waste Reduction

- Shared use of newspapers
- Duplexed copies
- Reuse of payroll envelopes
- Form consolidation
- Obsolete forms used for note pads
- Use loose-leaf binders when possible to eliminate unnecessary copies

Procurement

- Paper
- Post-It Notes
- Office supplies
- Envelopes

SOCIAL SERVICES

Recycling Collection

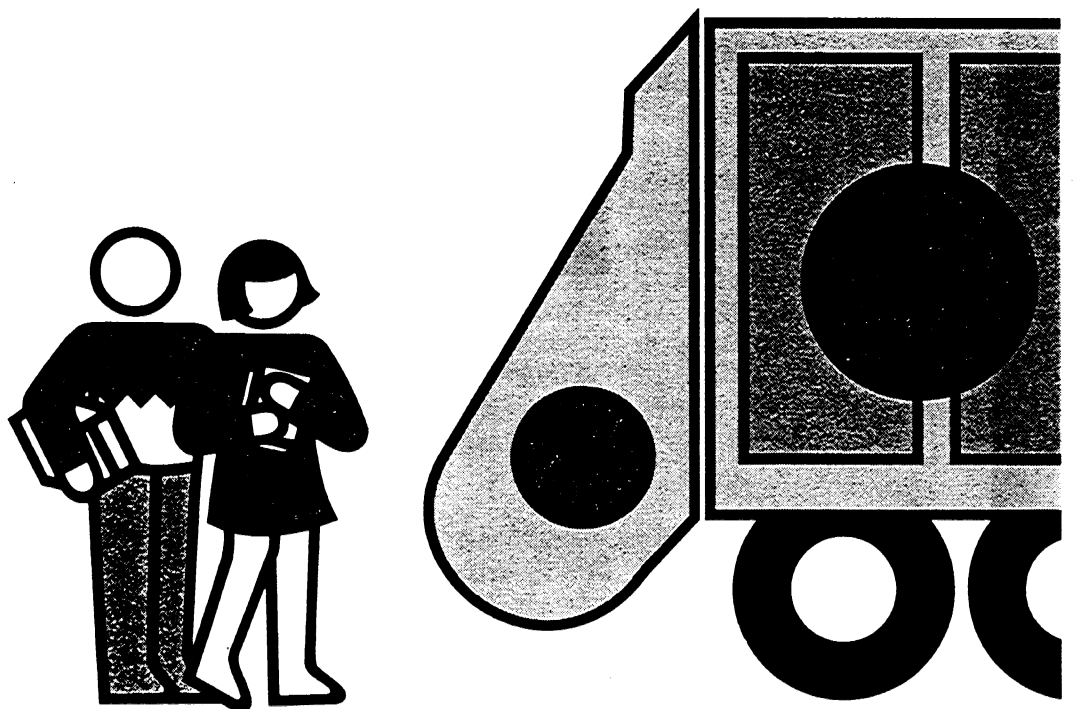
All types of acceptable paper
Newsprint
Corrugated
Telephone books
Aluminum
PC printer ribbons

Waste Reduction

Duplexed copies
Scrap paper used for note pads
Recycle laser toner cartridges

Procurement

Paper
Post-It notes
Tablet paper



STATE RECYCLING GOALS

Specific recycling goals for the State were established in RSMo 34.031-34.034. Following is an update on the State's progress towards meeting these goals.

1. **Chlorofluorocarbons (CFC's):** The State of Missouri does not purchase any products manufactured in whole or in part with CFC's.
2. **Paper Products:** The Office of Administration, Division of Purchasing and Materials Management contracts for recycled paper. The following goals are currently being met for recycled paper contents:
 - a. 40% recovered material in newsprint
 - b. 80% recovered material for paperboard
 - c. 50% waste paper in high grade printing/paper
 - d. 5% to 40% in tissue products
3. **Recycling Collection:** The Office of Administration, Division of Purchasing and Materials Management administers collection of recyclable materials from state agencies. Each month additional agencies are added to the recycling collection program around the state. Materials currently being collected are paper, aluminum, tin and scrap metals.

The state continues to pursue a feasible, convenient collection solution for newsprint, used motor oil, cardboard and other low demand, high supply items. The Division of Purchasing and Materials Management expects to have newspaper and aluminum collection contracts established in fiscal year 1995. A corrugated (cardboard) collection program is also being pursued.
4. **Missouri Correctional Enterprises:** The Office of Administration is considering establishing recycling activities through the Missouri Correctional Enterprises. Such activities may include the collection of corrugated paper and the production of end products from this paper. The Missouri Correctional Enterprises has also received a grant from the EIERA Missouri Market Development Program to purchase a mobile tire shredder to recycle waste tires. This effort will focus on recycling of tires purchased to support the state's vehicle fleet and those in abandoned tire dumps.

5. **Re-refined Oil:** The Office of Administration, Vehicle Maintenance, in the past, procured up to 45% of their oil requirements with re-refined oil. However, the cost of re-refined oil now exceeds the cost of virgin oil by more than 10%. As new re-refined oil products are introduced to the market, state departments will be notified of their availability through the MIRC. Surveys will be conducted at the close of fiscal year 1995 to determine the usage and performance of these alternative fuels.
6. **Recycled Products Currently on Statewide Contract:** The Office of Administration, Division of Purchasing produces a quarterly listing of products having recovered materials and services relating to recycling or the environment which are on statewide contracts. This information is available to all state agencies and Cooperative Procurement members. Please contact Cynthia Stafford, State Office Recycling Coordinator, Division of Purchasing, P.O. Box 809, Jefferson City, Missouri 65101 or phone (314) 751-3384.
7. **Alternative Recycled Products for Currently Purchased Virgin Products:** The Office of Administration, Division of Purchasing and Materials Management chairs a Hazardous Materials and Recycling Subcommittee which focuses on procuring safer "green" products in lieu of hazardous materials.
8. **Waste Audits:** Waste audits will again be conducted during fiscal year 1995. Information obtained from these audits will be used to determine any changes which may have occurred in the waste stream, to identify additional recyclable products and to document waste reduction activities.
9. **Expanded Policy on Recycling and Waste Reduction:** The 1989 Policy on Recycling and Waste Reduction will be reviewed and updated by the Missouri Interagency Recycling Committee.
10. **Recycled Products Guide:** A Recycled Products Guide for state agencies to procure recycled products will be made available in fiscal year 1995.

**STATE RECYCLING AWARD
FISCAL YEAR 1994**

The Office of Administration is pleased to present the first annual State Recycling Award to the Springfield State Office Building. Each fiscal year a state department, agency, facility or institution will be awarded the State Recycling Award for outstanding performance in recycling collection, waste reduction and procurement. The award is presented to the organization which demonstrates the best overall effort to closing the recycling loop by incorporating an in-house recycling program of collection, waste reduction and recovered product procurement.

The Springfield State Office Building, as managed by the Office of Administration, Division of Facilities Management, has committed their building to "thinking green". Under the leadership of Ms. Sigrid Johnson, Building Manager, and through the efforts of David Conley and the housekeeping crew, the Springfield State Office Building has implemented a complete recycling collection and waste reduction program for paper, aluminum, shredded materials, plastics, glass, styrofoam and corrugated materials. They operate an efficient and clean recycling program with labeled containers, central collection points and established goals to increase current recycling activities.

To reduce energy usage, the Springfield State Office Building has installed a variable-speed drive HVAC unit for increased efficiency and motion sensor activated lighting. Fluorescent tubes in light fixtures were reduced from four to two.

While several state offices are working diligently to "reduce, reuse and recycle", the Springfield State Office Building is deserving of the State Recycling Award for fiscal year 1994 because of the spirit in which these activities were undertaken. The Facilities Management group of the Springfield State Office Building was chosen for this award based on their commitment to position themselves as a leader of environmental awareness and cost-consciousness in public building operations. This agency has made a commitment to recycle and reduce waste through its own initiative and the volunteer efforts of its staff.

EIERA RECOMMENDATIONS UPDATE

The Environmental Improvement and Energy Resources Authority (EIERA) consults with the Office of Administration in the operation of the state government recycling system as mandated in RSMo 34.031. In the 1991 Missouri Recycling and Waste Reduction Report, the EIERA made recommendations to help improve state recycling activities. Listed below are the EIERA recommendations and an update on the State's progress in addressing these recommendations.

1. **Designate a full time State Office Recycling Coordinator in the Office of Administration (OA), Division of Purchasing and Materials Management, to facilitate state recycling collection, waste reduction, and recycled product procurement.**

The full time State Office Recycling Coordinator in the Division of Purchasing and Materials Management has been appointed.

2. **Reorganize the Missouri Interdepartmental Committee on Waste Reduction and Resources Recovery to include representatives from all departments and state agencies responsible for recycling collection, waste reduction and purchasing.**

This group has been renamed the Missouri Interagency Recycling Committee (MIRC) and plans to hold its first meeting in the first quarter of fiscal year 1995. Future MIRC activities will include selecting recycling representatives in each department and developing individualized departmental plans for all recycling activities.

3. **Expand the Policy on Recycling and Waste Reduction to include an on-going "Buy-Recycled Campaign" to promote market development for recovered materials, especially paper products, retread tires, recycled motor oil, and other products manufactured with recycled materials.**

The Policy on Recycling and Waste Reduction will be reviewed and updated by the Missouri Interagency Recycling Committee.

A "Missouri Buy-Recycled Initiative" has been initiated by the Governor through the EIERA Missouri Market Development Program. This initiative is supported by an interagency committee including representatives from EIERA, the Missouri Department of Natural Resources, the Department of Economic

Development, the Office of Administration State Office Recycling Coordinator, as well as a public/private coalition.

4. **Facilitate data collection for the "Annual Report on Recycling and Waste Reduction" by using a fiscal year reporting period and upgrading the Missouri Automated Procurement System (MAPS) database to track procurement of products made with recovered materials.**

The fiscal year 1994 report includes procurement data obtained from MAPS on a fiscal year basis. Updating the MAPS database was the primary focus in the state's recycling activities this year. Thousands of products were renumbered in order to identify them as recycled or virgin materials. Data can now be accumulated on types, volume, and costs of recycled products procured by all state departments through the Office of Administration.

5. **Enhance statewide market development activities through interagency cooperation between OA, DNR, DED, and EIERA to coordinate activities and reduce duplication of efforts.**

These four agencies continue to coordinate activities through the EIERA Missouri Market Development Program. All agencies are participating in the development of the Missouri Recycling Information System which is a new data management and communication tool that will link information about supply and demand of recovered materials in the state. Also, DED and DNR work with the EIERA to provide financial assistance to businesses utilizing recovered materials in manufacturing.